

has become quite a source of income to him. In a little community where there is no health officer and no effort from officialism this illustrates how much can be accomplished.

Dr. George Blumer, San Francisco.—Just a word regarding Dr. Cole's remarks relative to statistics. Statistics have a place if properly carried out. With regard to the importance of the heredity of the soil. A number of papers have recently gone over this question. In a paper by Miller, while he does not entirely disapprove of heredity, he thinks more attention should be paid to contamination by contact. He shows that in families where the father is tuberculous, for instance, the chance of transmission of infection to the child is less; where the mother is tuberculous the child becomes tuberculous in larger proportion than where the father is tuberculous. The father is away most of the time, and not brought into contact with the child. Another question is early diagnosis in these cases; this has been impressed upon me by a large number of sputum examinations. The general practitioner, as a rule, expects to find typical bacilli in the sputum before making a diagnosis. In some of the large German sanatoria all the way from 60 to 80 per cent of cases coming in have no tubercle bacilli in the sputum. So that if you wait until the patient's sputum contains bacilli, you wait until the disease has progressed too far. They rely in these cases upon the physical signs and upon the tuberculin reaction.

Dr. F. M. Pottenger, Los Angeles.—I am glad that Dr. Blumer brought out his point with regard to early diagnosis. Early diagnosis has been one of my fads. I believe that the diagnosis of tuberculosis should be made by the clinical history and physical examination. It should be so made in a great percentage of cases. I do not believe in waiting for the microscope. The microscope has done great good, but on the other hand a great deal of harm, in the fact that it has made physicians rely upon it for diagnosis. Physical diagnosis has degenerated somewhat on that account. With regard to climate, there is no specific climate for tuberculosis. The best place for tuberculous patients is where they can have the most intelligent care, pure air and good food. I believe in climate; but everybody cannot take advantage of climate. If you can, go to a good climate; but it is not necessary to send the patient away from home. Regarding sanatoria for tuberculosis, I do not believe there is any better place anywhere than in a well-conducted sanatorium. I think that Dr. King has brought out that point. It is not every man who can start a sanatorium. The patients go to a sanatorium because of the man at the head of the institution. A man must throw his soul into the sanatorium to make it a success. Regarding the soil, the point is this: we should look more toward keeping the body in a high state of resistance. I believe in taking every precaution that can be taken. The French dispensaries have been a great success. A dispensary is really better than a sanatorium. Every city should have a municipal dispensary. With a campaign of education, teaching the people, then putting in sanatoria and dispensaries, I believe we can relegate tuberculosis to a thing of the past. House infection has been brought out. This subject has been studied in New York and Philadelphia. It is shown that there are certain houses which show infection within a certain time. These houses which show it, show cases coming up one after another for a long time. There are 325,000 rooms in Greater New York which have not a room or window for ventilation. San Francisco and Los Angeles will be just such places unless the medical profession take it into their own hands. The city council does not consider these things. The medical profession should guide the people in these matters of health.

## THE ADVANTAGE OF MULES OPERATION OVER SIMPLE ENUCLEATION.\*

By REDMOND PAYNE, M. D., San Francisco.

THE loss of an eye, because of its effect upon the general appearance of a patient is a great hindrance to him in almost every walk of life, so just as we succeed in making his appearance the more natural, we add vastly to his chances of success and happiness. After simple enucleation the orbit presents a large, deep cavity with great recession of the lids. There is a great deal of mucus secretion collected which cannot drain out; this macerates the lashes, and produces a more or less repulsive appearance. With the usual prosthesis this cavity is at best only partly filled. The enophthalmus is always apparent, frequently quite marked. There is always more or less collection of mucus and the mobility of the artificial eye is slight, while in children the development of the orbit is hindered.

Now when Mules operation is done, that is, the cornea amputated at the limbus, the sclera eviscerated and a vitrified glass ball enclosed, the orbital cavity is completely filled. There is an absence of enophthalmus, tears and secretion, the mobility of the eye is better than with any other method, and what is very important in the young, the orbit is said to continue to develop. The cosmetic effect is so vastly superior, either with or without the artificial eye in place, that I think this method should always be selected where there is no contra-indication.

The glass ball has been used some 15 years now and no case reported of its having been broken. The gold ball has no advantage, the silver ball produces argyria and the aluminum disintegrates, producing irritation, and is finally extruded. About the only absolute contra-indications would seem to be intra-ocular growths, eyes which have already excited sympathetic ophthalmitis and advanced atrophy of the globe. It has been used successfully in almost every other condition. Glaucoma seems no contra-indication judging from the cases reported; and in the hands of some, the results were highly satisfactory in suppuration of the globe. For the present, however, I think I shall regard this latter as a contra-indication. I have made the operation something like a dozen times now without failure—that is, regarding failure as the escape of the glass ball, sympathetic ophthalmitis, or an irritable stump, as these are the cases of failure so far reported. The escape of the glass ball is prevented, I think, by care in selecting the size, and adopting very simple operative technique, thus getting only slight reaction and less tension on the sutures. Sympathetic ophthalmitis has not happened with me, for I have been careful to keep well within the indications of the operation. The irritable stump which has happened with some operators seems to be due to the im-

\* Read before the San Francisco Society of Eye, Ear, Nose and Throat Surgeons.

bedded sutures used to bring the scleral wound together. This I think I have avoided by using the silk sutures, bringing conjunctival and scleral wound both together, and using care to coaptate the cut edges of both. It heals readily, requiring ten days, and by that time many of the silk sutures have cut out. I have not found any occasion for the separate scleral sutures, hence there are none imbedded to produce an irritable stump.

The cases selected for the operation have been the following:

Case I—The whole cornea a large white cicatrix, following gonorrheal ophthalmia.

Case II—Hemorrhage glaucoma. Account of an old injury producing dislocation of the lens, traumatic cataract, etc. Eye continually painful. Not relieved by sclerotomies.

Case III—Old iridocyclitis. Painful, tender eye. No vision.

Case IV—Large staphyloma of anterior segment of eye protruding between lids.

Case V—Acute iridocyclitis due to slight blow to eyeball, one year after extracting piece of steel.

Case VI—Hemorrhagic glaucoma, due to recent blow upon the eye. Eye continually painful. Not relieved by sclerotomies.

Case VII—Large white cicatrix of cornea—strong convergent squint, producing much headache.

Case VIII—Extensive laceration of the anterior segment of the eye by wire; infected. No hope for a globe.

Case IX—Old iridocyclitis; but little vision. Eye painful. Inflammation recurrent.

There are two or three others, whose histories I cannot lay my hands on. I believe that Mules operation is not alone a justifiable procedure, but the one to be selected where no contra-indication exists, and that the more it is done the fewer failures we will have.

#### THE "GOOD THINGS" WE ARE!

The "patent" medicines sold to consumers will hold their own for a good many years to come, I believe. But the patent medicine of the future is the one that will be advertised only to doctors. Some of the most profitable remedies of the present time are of this class. They are called proprietary remedies. The general public never hears of them through the daily press. All their publicity is secured through the medical press, by means of the manufacturer's literature, sometimes gotten out in the shape of a medical journal, and through samples to doctors. For one physician capable of prescribing the precise medicinal agents needed by each individual patient there are at least five who prescribe these proprietaries. \* \* \*

The proprietary medicine of the future, though, will be advertised through these channels. The medical papers will reap the harvest, and the physician himself, always so loud in the denunciation of "patent" medicines, will be the most important medium of advertising at the command of the proprietary manufacturer. In fact, he is that to-day.—*Printers' Ink*.

[See editorial note, "Nostrums and Quacks," page 266.]

A recent investigation in Berlin shows that 60 per cent of the quacks who are doing good business were ordinary day laborers before they became so-called "benefactors of mankind"; that only 40 per cent had had an elementary common school education; that 85 per cent of the women had been servant girls, and that 30 per cent of the total number of quacks had criminal records.—Dr. O. T. Osborne, Address, A. M. A.

## OPERATIVE FISTULÆ OF THE MALE URETHRA.\*

By R. L. RIGDON, M. D., San Francisco.

IN OPERATING upon the male urethra through the perineum it has been my experience that a proportion of the patients do not make a wholly satisfactory recovery from the operation wound. In the large majority of cases the recovery is prompt and complete, but in rare instances delayed union is noticed, resulting in a fistula more or less persistent. This has come to me somewhat in the nature of a surprise, for from the reports of other surgeons it does not appear that fistula ever follows external urethrotomy. It is quite frequently mentioned as the result of an abscess, traumatism, tight stricture, etc., but does not seem to be credited as a possibility following operation. It is the purpose of this paper to present to you two cases illustrative of the condition mentioned.

In studying these cases I have endeavored to determine the cause or causes which have operated to produce the fistulae. It is well known that the escaping urine will follow the line of least resistance, whether this be through the natural channel, as is normally the case, or through accidental openings leading from the urethra. When an opening is made through the perineum into the canal it offers an easy line of escape for the oncoming flow, and the whole or part of the stream is diverted through this new channel. As union of the cut edges occurs and the opening becomes gradually smaller, the balance of resistance, which for the time has resided in the normal urethra, shifts more and more toward the artificial opening, until finally the urethra again offers the path of easier escape, and normal urination is established. Another factor to be taken into account is the direction of the stream in the urinary canal. The prostatic urethra is directed downward and forward, and is joined by the membranous urethra at a wide angle, and from this point the curve gradually passes forward and a little upward. The urinary stream following this canal will, because of its direction, tend to impinge somewhat upon the urethral floor, especially in the membranous portion of the canal; and if there is any breach of continuity in this locality, the urine will be directed toward it. Theoretically, then, a wound on the floor of the canal would be more readily kept open by the stream than would a similar opening on the upper wall.

The force with which the stream is delivered will, to a certain extent, determine the direction the stream will take. If the urine issues with considerable force, it will tend to shoot past any unnatural opening that may be present; but, on the other hand, if it is delivered slowly it will trickle into the mouth of a urethral wound, and find its way to the surface by the artificial route. The shape assumed by the urethral wound in process of healing may be such as to tend to direct the urine into its open mouth.

In the different portions of the canal the mucous and submucous tissues vary considerably in their degrees of firmness or laxity, as can be demonstrated easily by the endoscopic picture presented in the study of the normal canal. In one portion of the canal, especially the bulbous, the folding of the mucous membrane is very noticeable, while in the adjoining membranous urethra the tissues are much more tense. It is conceivable that an operative wound of the urethra might be located so that the urethral orifice would be at the junction of the membranous and the bulbous portions of the canal; and should a lax fold of the urethra in front of the opening rise up, as it does in the face of the endoscopic tube, it might easily tend to divert the urine into the unnatural opening. If in this supposed case there

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